

GERSHGORN, M.A.; KAZARNOVSKIY, D.S.; FILONOV, I.G.; KUTSENKO, A.D.; UL'YANOV, D.P.

Production of low-alloy bessemer rail steel. Stal' no.5:404-408  
My '61. (MIRA 14:5)

1. Ukrainskiy institut metallov i zavod im. Dzerzhinskogo.  
(Bessemer process) (Steel alloys)

FILONOV, I.G.

The Dzerzhinskii Metallurgical Plant is 75 years old.  
Stal' 24 no.5:389-391 My '64. (MIRA 17:12)

1. Direktor Dneprovskogo metallurgicheskogo zavoda im.  
Dzerzhinskogo.

BESEDIN, P.T.; SOROKIN, A.A.; FILONOV, I.G.; KARPUNIN, A.M.;  
CHEPELEV, P.M.; SHCHERBINA, P.A.; AVDEYEV, M.G.; KUTSENKO,  
A.D.; TSELYUKO, V.I.; CHERNEVICH, Ye.M.; ORGIYAN, V.S.;  
CHERNETA, Z.A.

Improving the technology of the heat treatment of rails  
at the Dzerzhinskii Plant for the purpose of increasing  
their durability in tracks. Stal' 24 no.5:445-448 My '64.  
(MIRA 17:12)

1. Dneprovskiy metallurgicheskii zavod im. Dzerzhinskogo i  
Ukrainskiy nauchno-issledovatel'skiy institut metallov.

I. O. Filonov

24(7)

PHASE I BOOK EXPLORATION

Nov/1700

Libr. Universitet

Materialy I Vsesoyuznogo soveshchaniya po spektroskopii, 1956  
B. III. Atomsaya spektroskopiya (Materials of the 10th All-Union  
Conference on Spectroscopy, 1956. Vol. 2) Atomic Spectroscopy  
Groz. Izd-vo L'vovskogo univ., 1958. 388 p. (Series: Izv.  
Fizicheskoy shkolny, vyp. 4(9)) 3,000 copies printed.

Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po  
spektroskopii.

Editorial Board: G.S. Landsberg, Academician, (Resp. Ed.);  
B.A. Borovskiy, Doctor of Physical and Mathematical Sciences;  
V.I. Babitskiy, Doctor of Physical and Mathematical Sciences;  
V.A. Babitskiy, Doctor of Physical and Mathematical Sciences;  
V.G. Koritskiy, Candidate of Technical Sciences; S.M. Rayevskiy,  
Candidate of Physical and Technical Sciences; L.K. Klimovskiy,  
Candidate of Physical and Mathematical Sciences; V.S. Rilyayev,  
(Deceased), Doctor of Physical and Mathematical Sciences; A.Ye.  
Aleksandrov, Doctor of Physical and Mathematical Sciences;  
M.I. S.K. Gaser; Tech. Ed.: T.V. Saryuk.

Foreword: This book is intended for scientists and researchers in  
the field of spectroscopy, as well as for technical personnel  
using spectrum analysis in various industries.

CONTENTS: This volume contains 177 scientific and technical studies  
of atomic spectroscopy presented at the 10th All-Union Confer-  
ence on Spectroscopy in 1956. The studies were carried out by  
scientific and technical institutes and include  
abstracts, bibliographies of Soviet and other sources. The  
studies cover many phases of spectroscopy: spectra of rare earths,  
electromagnetic radiation, physicochemical methods for controlling  
medium production, physics and technology of gas discharge,  
optics and spectroscopy, absorption spectroscopy, analysis of ores  
and minerals, photographic methods for quantitative spectral  
analysis of metals and alloys, spectral determination of the  
hydrogen content of metals by means of isotopes, tables and  
atlases of spectral lines, spark spectroscopy, statistical  
statistical study of variation in the parameters of calibration  
curves, determination of traces of metals, spectrum analysis in  
metallurgy, thermometry in metallurgy, and principles and  
practice of spectrochemical analysis.

Card 2/31

Materials of the 10th All-Union Conference (cont.)

Ardarov, T.K. Spectrum Analysis of Lithium in Brines 512

Pavlyuchenko, M.M., V.M. Akulovich, and I.O. Filonov. Spectral 516

Determination of Microelements in Mineral Salts

Petrov, G.A. Use of Emission Spectrum Analysis in the 519

Chemical Reagent Industry

Karlin'sh, R.Ya., A.K. Paegle, and E.A. Silin'sh. Use of 521

Spectrum Analysis in Citric Acid Production

Palatnik, I.I. Determination of Calcium Oxide in Fluxed 522

Sinter by Means of a Styloaster

Pisarevi, V.D., and T.I. Ivanova. Quenching of Cyanogen Bands 524

in Spectrum Analysis of Solutions

Maltov, V.V., and E.I. Ignova. Statistical Study of Variations 528

in the Parameters of Calibration Curves

Card 29/31

PAVLYUCHENKO, M.M.; AKULOVICH, V.M.; FILONOV, I.O.

Spectral determination of trace elements in mineral salts.

Fiz.sbor. no.4:516-519 '58.

(MIRA 12:5)

1. Institut khimii AN BSSR.

(Trace elements--Spectra)

FILONOV, K.

Bargusin State Preserve. IUn.nat.no.9:21-22 D '56. (MLBA 10:2)

1. Direktor zapovednika.  
(Bargusin State Preserve)

FILONOV, K.

Interesting aspect of the diet of *Marmota kamtschatica* in the  
Barguzin Reserve. Izv. Irk. gos. nauch.-issl. protivochum. inst,  
21:279-281 '59. (MIRA 14:1)

(BARGUZIN RANGE—MARMOTS)

FILONOV, K.P.

Fall and winter migrations of the hawfinch. Kraeved.sbor.  
no.4:133-135 '59. (MIRA 13:7)  
(Bargusin Preserve--Grosbeaks)  
(Birds--Migration)



ТУХЕНОВ, В.С.; ЕЛОНОВ, К.П.; КАПЛИН, В.М.

Barguzin State Preserve. Okhr. prir. Sib. i Dal'. Vost.  
no.1,187-192 '62. (MIRA 17:5)

SKRYABIN, N.G.; FILONOV, K.P.

Materials on the avifauna of the northeastern coast of Lake Baikal.  
Trudy BGZ no.4:119-189 '62. (MIRA 17:9)

FILONOV, K.P.

Fluctuation in the abundance of winter birds. Trudy BGZ no.4:  
191-202 '62.

Addition to the list of mammals in the Barguzin Preserve.  
Ibid.:228-229 (MIRA 17:9)

FILONOV, K.P.; KAPLIN, G.S.

Spawning of grayling in the preserve. Trudy BGZ no.4:230-232 1962.  
(MIRA 17:9)

FILONOV, K.P.

Seasonal development of nature in the Bashkir Preserve. Trudy  
Bash.gos.zap. no.2:13-43 '63.

Materials on winter bird populations in the Bashkir Preserve.  
Ibid.:127-143 (MIRA 18:5)

FILED. 1.1.

Quantitative characteristics of the summer ornithofauna of the  
Bashkir Preserve. Ornitologia no.7:63-66 '65.

(MIRA 18:10)

1.2300

1573

27933

S/135/61/GCG/010/002/008  
A006/A101

AUTHORS: Kotov, B. I., Goncharenko, N. M., Filonov, K. S., Engineers

TITLE: Mechanization and automation of welding operations at the "Krasnyy Kotel'shchik" Plant

PERIODICAL: Svarochnoye proizvodstvo, no. 10, 1961, 14-17

TEXT: In order to fulfill the requirements of the current Seven Year Plan, the Plant mentioned above must achieve an increased production of boilers mainly through mechanization and automation of welding operations. The following main fields of welding operations and achievements brought about are enumerated:

1) Electric slag welding. This process is now being used for welding 24 mm thick metal; bi-layer metal; up to 90 mm thick austenite chrome-nickel shells; large size shells of 40 - 90 mm wall thickness, 3,100 mm in diameter, up to 2,100 mm length and 120 mm thick and 2,000 mm long panels. Welding is carried out with devices A-340 and A372M, austenite wire  $\text{Cb-1X18H9B}$  ( $\text{Sv1Kh18N9B}$ ) under  $\text{TK3-HX}$  ( $\text{TKZ-NZh}$ ) flux. In comparison with multi-pass automatic welding the production cycle when using electric slag welding was reduced by 35-40%, labor consumption by 30%, power consumption by almost twice and flux consumption by a factor of 20.

Card 1/3

X

Mechanization and automation of welding ...

27933

S/135/61/000/010/002/008  
A006/A101

2) Automatic and semi-automatic submerged electric-arc welding. The Plant developed a number of automatic machines including a device with an automotive column and a portal type machine for the welding of containers. Automated welding was also applied for thin-walled large-size 1X18H9T (1Kh18N9T) steel containers of 3060 mm in diameter, 10,780 mm cylinder length, and 6 mm wall thickness. The operational temperature of the container wall was - 180°C. The welding of the cylindrical section was 50% automated, the panels were welded with tractor TC-32 (TS-32) which had been redesigned. A machine with a chain beveling tool and a carriage, moving together with the welding torch, is being used for the automatic welding of frame-beam structures of boilers; a rotary type machine with adjustable inclination of the face plate is employed for welding flanges to 200 - 1,600-mm sleeves and pipes. Satisfactory results were obtained with automatic building up with austenite steel of sealing surfaces of boiler fixtures and high-pressure steam preheaters. Several units with a rotating face plate were designed to fasten built-up parts of various sizes and weights.

3) Resistance butt welding of pipes. Resistance welding has been fully automated and the following butt welding machines are being used: MCM-150 (MSM-150), ACM-150 (ASM-150), ACM-300 (ASM-300), MCM-320 (MSM-320) and MCQ-400 (MSQ-400). At the recommendation of TsNIITMASH butt-welding of pipes by continuous flashing

Card 2/3



Mechanization and automation of welding ...

27933 S/135/61/000/010/002/008  
A006/A101

was developed and introduced. From 1957 butt welding of perlite steel pipes was assimilated, eliminating internal burrs by oxygen-air blast. Presently research is directed on butt welding of pipes with induction heating. 4) Flame cutting of metals is widely used. Manual and machine oxygen cutting is employed for cutting carbon low-alloy and two-layer steels and oxygen-flux cutting for cutting high-alloy steels. From 1957 the aforementioned operations have been carried out with the aid of natural gas. With the assistance of the Rostov NIITM, the Institute of Electric Welding imeni Ye. O. Paton, NIITVCh imeni V. P. Vologdin, TsNIITMASH, and the Taganrog Radio-Engineering Institute, the "Krasnyy Kotel'shchik" Plant is occupied with a series of investigations and projects including the weldability of new steel grades, the development of efficient electrodes and welding fluxes. In the honour of the XXII KPSS Congress the Plant undertook to design the first TPP-110 (TPP-110) boiler with 950 t/hour steam capacity. There are 7 figures and 1 Soviet-bloc reference.

Card 3/3

SOV/84-48-4-8/57

AUTHOR: Filonov, L.

TITLE: ~~When Lights~~ Are Burning (Kogda goryat ogni)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 5, pp 12-13 (USSR)

ABSTRACT: A story relating the activities of a night shift of maintenance teams in the Sverdlovsk airport. A photograph, showing an Il-12 aircraft before a night start, accompanies the text.

1. Aircraft--Maintenance 2. Personnel--Performance

Card 1/1

FILONOV, L.B.

Dependence of the selection time on the number of discriminative features.  
Vop. psikholog. 9 no.1:89-103 Ja-F '63. (MIRA 16:4)

1. Institut psikhologii Akademii pedagogicheskikh nauk RSFSR, Moskva.  
(Choice (Psychology))

MASLOV, Yuvenaliy Aleksandrovich; MIKHAYLOV, S.I., kand.tekhn.nauk,  
retsensent; FILONOV, L.K., inzh., retsensent; DENISOV, Yu.A.,  
inzh., red.; DUGINA, N.A., tekhn.red.

[Welding] Svarochnoe proizvodstvo. Moskva, Gos.nauchno-tekhn.  
izd-vo lit-ry, 1959. 328 p. (MIRA 12:11)  
(Welding)

**FILONOV, M.**

Industrial organization and planning. Mor.flot 16 no.9:15-16 8 '56.  
(MIRA 9:10)

1.Glavnyy inshener Kanonerskogo saveda.  
(Ships--Maintenance and repair)

ACCESSION NR: AP4042591

S/0056/64/046/006/2244/2245

AUTHORS: Perfilov, N. A.; Solov'yeva, Z. I.; Filov, R. A.

TITLE: Alpha particle spectrum of ternary spontaneous fission of Cm-244

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 6, 1964, 2244-2245

TOPIC TAGS: curium, alpha particle, fission product, energy distribution, alpha spectroscopy

ABSTRACT: The investigation was undertaken in order to check whether the spectral characteristic of the fission alpha particles is indeed independent of the mass number, as was observed by the authors earlier (Atomn. energ. v. 14, 575, 1963; ZhETF v. 44, 1832, 1963). The test was also aimed at checking the correctness of the value obtained for the most probable energy of the fission alpha particles for Cm<sup>242</sup>. The same experimental setup was used as in the earlier

Card

1/3

ACCESSION NR: AP4042591

investigation, and geometrical corrections were introduced into the experimentally observed energy distribution. The obtained energy spectrum for the ternary fission of  $\text{Cm}^{244}$  was found to have a maximum near  $15.5 \pm 0.5$  MeV and, assuming a Gaussian distribution, a width  $11.5 \pm 0.5$  MeV at half height. The values obtained for  $\text{Cm}^{242}$  are  $15.5 \pm$  and  $12 \pm 1$ , respectively, indicating that the spectral characteristics agree, within the experimental error, also for two curium isotopes, as they did agree before in the case of U and Pu. However, the shift in the most probable energy of ternary-fission alpha particles cannot be established on the basis of data on three elements only. "The authors thank A. S. Krivokhatskiy for assistance." Orig. art. has: 1 figure.

ASSOCIATION: None

SUBMITTED: 01Apr64

ENCL: 01

SUB CODE: NP

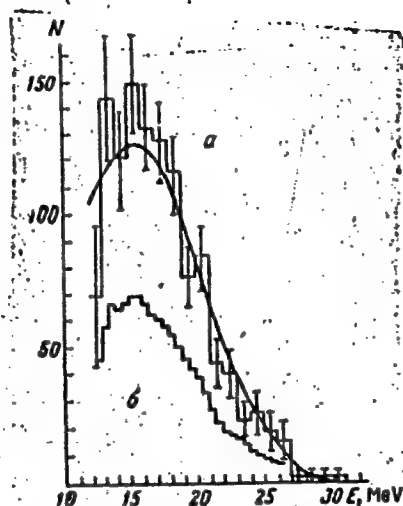
NR REF SOV: 004

OTHER: 003

Card 2/3

ACCESSION NR: AP4042591

ENCLOSURE: 01



Alpha particle energy spectrum of ternary  
fission of  $\text{Cm}^{244}$   
a - experimental, b - following data reduction

Card 3/3







L 51375-65

ACCESSION NR: AP5010967

UR/0286/65/000/007/0152/0153

AUTHORS: Ogarkov, A. G.; Malakhov, V. N.; Filonov, S. P.

TITLE: Double-piston hydraulic pump. Class 46, No. 169945

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 152-153

TOPIC TAGS: pump

ABSTRACT: This Author Certificate presents a double-piston hydraulic pump for driving gas supply units and injecting ignition fuel in internal combustion engines operating in the gas diesel cycle. The pump contains a housing with a piston pair of differing diameter and rotating and return devices. To reduce the size of the pump, the smaller diameter piston is fixed and is placed concentrically in the larger diameter piston (see Fig. 1 on the Enclosure). To simplify driving gas supply units, the units are connected to the pressure chamber of the larger diameter piston. To reduce ignition fuel consumption and to insure optimal control of the operating process, the smaller diameter piston has a band

rim. Orig. art. has: 1 diagram.

ASSOCIATION: none

SUBMITTED: 24Feb64

NO REF SOV: 000

ENCL: 01  
OTHER: 000

SUB CODE: IE

Card 1/2

L 51375-65

ACCESSION NR: AP5010967

ENCLOSURE: 01

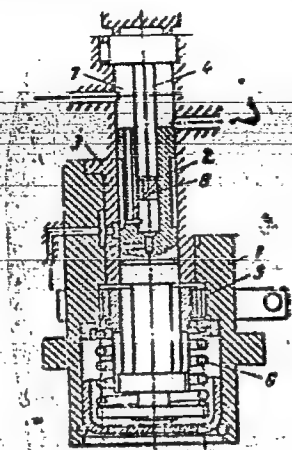


Fig. 1.

Double-piston hydraulic pump

1- housing; 2- larger diameter piston; 3- bushing of larger diameter piston;  
4- smaller diameter piston; 5- rotating device; 6- return device; 7- pressure  
chamber of larger diameter piston; 8- band rim

Card 2/2

L 20945-66 EWT(d)/EWT(m)/EWP(f)/EPF(n)-2/EWP(v)/T/EWP(t)/EWP(k)/ETC(m)-6 JD/WW/HM.

ACC NR: AP6007624 (N) SOURCE CODE: UR/0229/66/000/001/0034/0040 49

AUTHOR: Filonov, S. P.; Gibalov, A. I.

ORG: Lugansk Diesel-Locomotive Plant of October Revolution (Luganskiy teplovozostroitel'nyy zavod imeni Oktyabr'skoy revolyutsii) 3

TITLE: Gas-turbine plant with free piston gasifiers for river ships

SOURCE: Sudostroyeniye, no. 1, 1966, 34-40

TOPIC TAGS: marine engineering, gas turbine engine

ABSTRACT: A description of a gas-turbine plant designed and manufactured by the Lugansk Diesel-Locomotive Plant is presented. The plant was designed for a 5300-ton river ship and consisted of two 925-hp turbine units (port and starboard) and three free piston gasifiers of OP-95 type. The plant specification is as follows:

Rated capacity	1850 hp
Rated one-hour capacity (forward)	2035 hp
Rated capacity (backward)	640 hp
Fuel consumption	195 g/hp-hr
Rated rpm (forward)	300 rpm
Rated rpm (backward)	180 rpm
Efficiency of the plant	32.6 %
Weight of the plant	36 ton
Unit weight of the plant	19.5 kg/hp

Card 1/3

UDC: 621.431.74:621.438 2

L 20945-66

ACC NR: AP6007624

The data on OP-95 gasifiers are given below:

Engine piston diameter	280 mm
Compressor piston diameter	750 mm
Piston stroke	375 mm
Compression rate (diesel cylinder)	11.5
Max. cycle pressure	120 ± 5 kg/sq cm
Average piston speed	8.2 m/sec
Rated capacity (adiabatic)	850 hp
Max. one-hour capacity (adiabatic)	935 hp
Gas pressure	4.5 atm
Gas discharge	2.3 kg/sec
Gas temperature	490 C
Number of cycles	735 cycles/min
Fuel consumption	152 g/hp-hr
Efficiency	41.5 %
Size	4000 x 1500 x 2300 mm
Weight	6000 kg
Unit weight	7.06 kg/hp

2/3

L 20915-66

ACC NR: AP6007624

The five-stage turbine unit has the following ratings:

Rated capacity (forward)	925 hp
Rated capacity (backward)	320 hp
Rated rpm (on the shaft, forward)	9000 hp
Efficiency	78.5 %
Weight of the unit	9000 kg
Size	4018 x 2550 x 2616 mm

The fuel of DT-1 trade mark was used. The lubricants were of UT GOST 32-53 type. The design and operation of turbines and gasifiers were discussed and their cross-sections were shown in two figures. Flow diagrams were used for describing the operations of fuel and gas distribution systems. The arrangement of the pneumatic system was explained and the variation of air pressure under various operating conditions was graphically represented. Orig. art. has: 7 figures.

SUB CODE: 13 / SUBM DATE: None / ORIG REF: 000 / OTH REF: 000

Card 3/3 MQ 5

L 47373-66 EWP(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l)  
ACC NR: AP6029066 SOURCE CODE: UR/0413/66/000/014/0122/0122

INVENTOR: Filonov, S. P.; Khakharev, L. M.; Gibalov, A. I.; Chugunov, V. K.; Maslov, G. I.

ORG: none

TITLE: Device for transferring gas of a free-piston generator. Class 46, No. 184065  
/announced by Lugansk Order of Lenin Diesel Locomotive Building Plant im. October  
Revolution (Luganskiy ordena Lenina teplovozostroitel'nyy zavod)/

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 122

TOPIC TAGS: free piston generator, gas generator, pipeline, pneumatic servomechanism,  
valve, piston engine

ABSTRACT: The proposed device for the transfer of gas from a free piston generator  
(operating in a group of generators on a common gas pipeline) exhaust to the gas  
pipeline inlet contains atmospheric and main valves. In order to automate the gas  
transfer, the valves are equipped with pneumatic servo drives, interlocked with a  
slide valve, controlling the main valve by a servodrive, and rigidly connected with  
the servodrive of atmospheric valve which receives a command signal from a electro-  
pneumatic valve (see Fig. 1). In a modified version of the above-described device,

Card 1/2

UDC: 621.432.9-129.31-577-



L 47373-66

ACC NR: AP6029066

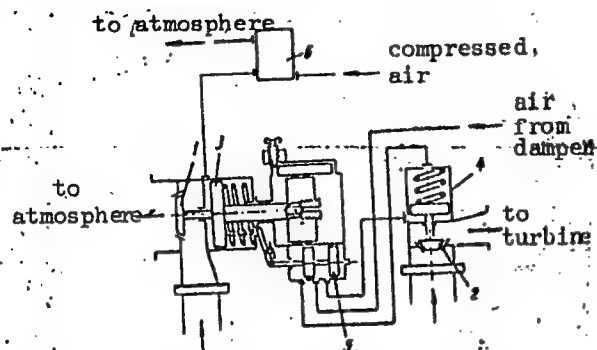


Fig. 1. Gas transfer device

- 1 - Atmospheric valve; 2 - main valve;
- 3 - servodrive of the atmospheric valve;
- 4 - servodrive of the main valve;
- 5 - slide valve; 6 - electropneumatic valve.

the servodrive of atmospheric valve was equipped with a damper in order to ensure gradual charging of the generator during the transfer of gas. Orig. art. has: 1 figure. [AV]

SUB CODE: 13,21,10 SUBM DATE: 15Mar65/

Card 2/2 mjs

FILONOV, V., inzhener.

Packaging flour in paper bags. Muk.-elev. prom. 23 no.6:27 Je '57.  
(MIRA 10:9)

1. Chelyabinskoye oblastnoye upravleniye khleboproduktov.  
(Flour)

*FILONOV, V.*

FILONOV, V.

Apparatus for automatic regulation of temperature in the hot air  
duct of the VTI-15 grain dryer. Muk.-elev.prom.23 no.8:27-28  
Ag '57. (MIRA 10:11)

1. Chelyabinskoye oblastnoye upravleniye khleboproduktov.  
(Grain--Drying)

FILONOV, V. A.

(DECEASED)

1963/2

c' 1963

MACHINE ENGINEERING  
steel rolling

see ILC

BOGOMOLOV, G.V.; FILONOV, V.A.

Hydrological cycles in the area of the Pripet fault. Dokl. AN  
BSSR 8 no. 3:172-174 Mr '64. (MIRA 17:5)

1. Institut geologicheskikh nauk, Gosudarstvennogo geologicheskogo  
komiteta SSSR.

*FILONOV, V. A.*

AUTHORS: Finkel'shteyn, Ya. B., Filonov, V. A., Soyfer, V. N. 20-4-39/51  
Obukhova, M. P.

TITLE: An Attempt to Apply Tritium as an Indicator for Studying the  
Dynamics of Underground Waters (Opyt primeneniya tritiya v ka-  
chestve indikatora dlya izucheniya dinamiki podzemnykh vod)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 4, pp. 671-672 (USSR)

ABSTRACT: Such experiments were carried out by the institute (see associa-  
tion) with tritium water of a high specific activity by intro-  
duction into an underground brook in 1956. As water was here  
"marked" by water absorption processes were not possible. This  
allowed the determination of the right velocity of the water mo-  
vement. Small quantities of the tritium water (100-200 ml) with  
a specific activity of 10-20 mCo/ml were injected in the compres-  
sion borehole and tritium was determined at the output in the  
working boreholes. The taken samples were filtered for the purpo-  
se of cleaning, twice distilled with potassium permanganate and  
hydrogen obtained of the calcium oxide formed by it by means of zinc  
dust at 500°. The latter was mixed with ethylene and checked in  
the Geiger-Mueller counter. For the experiment 4 boreholes were cho-  
sen: 1 hole for pumping in, and 3 working or observation holes  
resp. The marked water appeared quicker than it was calculated in  
all 3 observation boreholes. The water was pumped into a producti-  
ve layer of the solid-cemented sandstones of the Chokrak horizon.

Card 1/2

An Attempt to Apply Tritium as an Indicator for Studying the Dynamics of Underground Waters. 20-4-39/51

Following conclusions can be drawn: 1) the application of tritium as water indicator is efficient and probably forms the only investigation medium for layer water movements. 2) Thus following problems can be solved: a) the connexions between the boreholes and layers can be determined. b) the field of the real velocity can be determined. c) determination of some physical properties of the collector d) water filtration in the engineer-hydrogeology 3) the application of tritium is especially of value for its relative harmlessness in consequence of a soft  $\beta$ -radiation and a constant dilution under natural conditions. 4) the introduction of tritium water into the borehole can be carried out simultaneously with other investigations since the soft  $\beta$ -radiation does not influence the apparatus of the radioactive carottage. 5) For this purpose the working boreholes need not be stopped. There are 1 figure and 1 reference.

ASSOCIATION: Institute for Petroleum AN USSR (Institut nefti Akademii nauk SSSR)  
PRESENTED: May 11, 1957, by S. I. Mironov, Academician  
SUBMITTED: May 7, 1957  
AVAILABLE: Library of Congress  
Card 2/2

*Filonov, V. A.*

132-1-5/15

**AUTHORS:** Finkel'shteyn, Ya.B., Filonov, V.A., Soyfer, V.N., Obukhova, M.P.

**TITLE:** Experimentation with Radioactive Hydrogen-Tritium Isotopes as Tracers in the Study of Dynamics of Ground Water  
(Ob opyte primeneniya radioaktivnogo izotopa vodoroda-tritiya v kachestve indikatora dlya izucheniya dinamiki podzemnykh vod)

**PERIODICAL:** Razvedka i Okhrana Nedr, 1958, # 1, pp 28-35 (USSR)

**ABSTRACT:** The movement of subterranean water can be determined by using tritium, which has proved an ideal tracer under varying conditions, and is both inexpensive and safe to use. The method of "Marking" subterranean water is of special interest for the crude oil industry. When injecting water into oil-bearing strata, it is important to know the flow of water within the layer to rationally exploit the deposit.

Beginning in 1955, in the Laboratory No. 1 of the Petroleum Institute of the USSR Academy of Sciences, the authors of this article under the supervision of G.N. Flerov, F.A. Alekseyev and G.P. Gol'bek, conducted experiments with radioactive tracers. Super heavy water (where hydrogen is represented by its tritium modification) was chosen as the active agent.

Card 1/3



132-1-5/15

**Experimentation with Radioactive Hydrogen-Tritium Isotopes as Tracers  
in the Study of Dynamics of Ground Water**

Concentrations of tritium in the "marked" water occurring below the petroleum layer did not exceed the permissible dose, which was set at 0.05 millicurie / milliliter in the water, and  $5 \cdot 10^{-5}$  in the atmosphere. Different methods of marking water by means of tritium were examined by the authors, mainly by using gaseous samples (acetylene, hydrogen, vapor of water), which give clear indications with the Geiger-Mueller recorder. The method of measuring tritium in prepared samples consisted of three operations: electrolytic concentration, decomposition of water, and measuring the gaseous samples of hydrogen inside the sensitive Geiger-Mueller device.

The first experiment with tritium tracers in subterranean layers was conducted during the summer 1956 at the second Oktyabr' deposit. Injection of tritium into the injection wells was done by means of super heavy water placed in flasks. The active water which was injected into the layer XV had an average activity of 3 curie. Tests were taken every two hours during a period of 24 hours.

Card 2/3

132-1-5/15

**Experimentation with Radioactive Hydrogen-Tritium Isotopes as Tracers in the Study of Dynamics of Ground Water**

A wide range of hydrogeological and hydrotechnical problems can be solved with the aid of tritium. At present, a serious handicap is the bulkiness of equipment. However, measuring methods as well as apparatus can be simplified.

There are 2 photographs and 3 figures.

**ASSOCIATION:** Petroleum Institute of the USSR Academy of Sciences (Institut nefti AN SSSR)

**AVAILABLE:** Library of Congress

Card 3/3

ALEKSEYEV, P.A.; SOYFER, V.N.; FILONOV, V.A.; FINKEL'SHTEYN, Ya.B.

Using tritium, the isotope of hydrogen, in oil field development. Geol.  
nefti 2 no.12:47-52 D '58. (MIRA 12:2)

1. Institut geologii i razrabotki goryuchikh iskopayemykh AN SSR.  
(Hydrogen--Isotopes) (Oil field flooding)

FILONOV V. A.

89-3-16/30

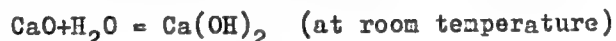
AUTHORS: Alekseyev, F. A. , Soyfer, V. N. , Filonov, V. A.  
Finkel'shteyn, Ya. B.

TITLE: Experimental Application of Tritium as a Detector of Oily  
Water (Opyt ispol'zovaniya tritiya kak indikatora plastovykh  
vod)

PERIODICAL: Atomnaya Energiya, 1958, Vol. 4, Nr 3, pp. 298 - 301 (USSR)

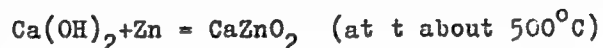
ABSTRACT: 3 ampules of 1 C tritium each were introduced successively  
into the water of the borehole. Two hours later the oily  
water to be investigated was taken out. At first this water  
was twice distilled in order to separate the possibly exist-  
ing natural radioactive salts and additions of oil. 10 - 16  
ml of this water were reduced to from 0,4 to 0,6 ml in a se-  
parately described electrolyzing apparatus. The electrolysis  
brings about a tritium concentration 7 - 10 times as strong.  
By the two following reactions H was separated from the  
samples concentrated by tritium:

Card 1/2



89-3-16/30

Experimental Application of Tritium as a Detector of Oily Water



The gas samples thus obtained were filled into a counting tube of 0,5 l (pressure 100 - 200 mm), into which ethylene is added, at 10 - 15 mm mercury column partial pressure. The operational voltage of this counting tube is at 1500 - 1800 V and the plateau at 100 - 150 V with 3 % slope. After an especially careful screening tritium could be proved. Altogether in a concrete case 400 samples from 8 boreholes could be checked. From these measurements the velocity at which the water marked by tritium distributes under the earth could be computed. There are 4 figures, 3 references, 0 of which are Slavic.

SUBMITTED: July 30, 1957

AVAILABLE: Library of Congress

1. Water-Oil detection
2. Tritium-Applications

Card 2/2

21(8)

SOV/7-58-7-4/13

AUTHORS: Alekseyev, F. A., Yermakov, V. I., Filonov, V. A.

TITLE: Concerning the Content of Radioactive Elements Found in Waters of Oil Field Deposits (K voprosu o sodержanii radioelementov v vodakh neftnykh mestorozhdeniy)

PERIODICAL: Geokhimiya, 1958, Nr 7, pp 642-649 (USSR)

ABSTRACT: The content of radium and uranium found in waters of oil field deposits was examined: radium was determined radio-chemically (Ref 3); the content of radon was measured by means of the electrometer ~~65-12~~, the amount of uranium ascertained by luminescence. The research was conducted at the Laboratoriya yadernoy geofiziki i geologii Instituta nefti AN SSSR (Laboratory for Nuclear Geophysics of the Petroleum Institute AS USSR). Waters from wells as well as surface water from oil fields of West Turkmenia (Tables 1-3) were examined. Samples were taken from the petrol and mineral gas province of Emba (Kazakhstan) (Tables 4,5) and from oil fields in the Cis-Uralian region (Tables 6-8). Independent of the type of deposit, the radium content ranges from  $10^{-10}$  g/l, seldom under  $10^{-11}$  g/l. The uranium content seldom surmounts  $1.0 \cdot 10^{-7}$  g/l.

Card 1/2

SOV/7-58-7-4/13

Concerning the Content of Radioactive Elements Found in Waters of Oil field Deposits

The largest quantities of radium are to be found in waters of the calcium chloride type. Uranium is concentrated in waters of the sodium bicarbonate type. Radium is found in largest amounts in the marginal zones of the oil field deposits. There are 8 tables and 12 references, 11 of which are Soviet.

ASSOCIATION: Institut nefti AN SSSR, Moskva (Petroleum Institute of the Academy of Sciences, USSR, Moscow)

SUBMITTED: July 7, 1958

Card 2/2

SOV/3600

**Telemeyra geotitilini** abnormis statur po. sp. nov. (ovoides radiolittigulae, immensis  
1. litoribus a geotitili vertit. (Muscat dephyssici. Collection of Articles on  
the Use of Radiocesium Radiation and Isotopes in Petrolium Geology) Moscow,  
Geotekhnichesk. 1959. 370 p. Bzrile vity insertat. 2,000 copies printed.

**Dr. I. V. A. Alekseyev, Professor, Doctor of Geological and Mineralogical Sciences**  
**Prof. Dr. I. A. P. Kalentarov**  
**Prof. Dr. A. S. Polozinov.**

Eng. Ed.: A.T. KILBARTON, 19000 ...

**REMARKS:** This book is intended for petroleum geologists, geophysicists and other scientists engaged in geological research who are interested in tectonics and aspects of petroleum prospecting.

[illegible]

Abstracted by: Abstracts of Chemical Engineering  
Oil Fields by the Method of Induced Emulsivity of Sodium  
Aluminate 8, 10. Mapping Petroleum-Water Surfaces of Contact in Asteraytium  
 100

**Bernson, R.A. Possibility of the Method of Increased Inductivity for Qualitative Evaluation of the Petrologic Capacity and Other Characteristics of Granite**

**Blazynski, Z. G.** The Effectiveness of the Methods of Induced Radioactivity of Sodium and Chloride to Compute the Oil- and Water-bearing Capacity of Petroleum Reservoirs

Author, S. M., O. G. Davtyan, P. Ya. Deniskin, A. P. Olsator, and V. O. Stetschenko.  
Utilization of Epithermal Neutrons in the Kevron-Kevron Method (KRM) of  
Estimating the Porosity of Sand and Carbonate Collectors 122

Kolobov, P.A., S.A. Denisov, E.Y. Klyuev, and V.P. Olsanov. The use of Gamma-Ray Spectrometry to Investigate Bone Ectasis. 256

**Orderman, Sh. A. Gamma-Ray Spectroscopy of Natural and Artificial Radio-**

Wetland Vegetation Under Some Conditions and

velocity,  $v$ , of  $\text{H}_2$ ,  $\text{NH}_3$ , and  $\text{H}_2\text{O}$  in  $\text{O}_2$  atmosphere at the point of water-nitrogen contact from data obtained using the known mass method with activation counters (KAT-15) and the neutron-beta-ray method based on thermal neutrons (BNK-2).

# Blahov, Ye.B. Separation of the Radiation of Different Elements During

the investigation of Petrovitsch-Barway born Soles by the Method of Isotoped Radioactivity of Ecdysis and Chlorine

Devorin, I. L., and N. A. Merzlov. The Use of Scintillation Counters to

101  
102  
103  
104  
105  
106  
107  
108  
109  
110  
111  
112  
113  
114  
115  
116  
117  
118  
119  
120  
121  
122  
123  
124  
125  
126  
127  
128  
129  
130  
131  
132  
133  
134  
135  
136  
137  
138  
139  
140  
141  
142  
143  
144  
145  
146  
147  
148  
149  
150  
151  
152  
153  
154  
155  
156  
157  
158  
159  
160  
161  
162  
163  
164  
165  
166  
167  
168  
169  
170  
171  
172  
173  
174  
175  
176  
177  
178  
179  
180  
181  
182  
183  
184  
185  
186  
187  
188  
189  
190  
191  
192  
193  
194  
195  
196  
197  
198  
199  
200  
201  
202  
203  
204  
205  
206  
207  
208  
209  
210  
211  
212  
213  
214  
215  
216  
217  
218  
219  
220  
221  
222  
223  
224  
225  
226  
227  
228  
229  
230  
231  
232  
233  
234  
235  
236  
237  
238  
239  
240  
241  
242  
243  
244  
245  
246  
247  
248  
249  
250  
251  
252  
253  
254  
255  
256  
257  
258  
259  
260  
261  
262  
263  
264  
265  
266  
267  
268  
269  
270  
271  
272  
273  
274  
275  
276  
277  
278  
279  
280  
281  
282  
283  
284  
285  
286  
287  
288  
289  
290  
291  
292  
293  
294  
295  
296  
297  
298  
299  
300  
301  
302  
303  
304  
305  
306  
307  
308  
309  
310  
311  
312  
313  
314  
315  
316  
317  
318  
319  
320  
321  
322  
323  
324  
325  
326  
327  
328  
329  
330  
331  
332  
333  
334  
335  
336  
337  
338  
339  
340  
341  
342  
343  
344  
345  
346  
347  
348  
349  
350  
351  
352  
353  
354  
355  
356  
357  
358  
359  
360  
361  
362  
363  
364  
365  
366  
367  
368  
369  
370  
371  
372  
373  
374  
375  
376  
377  
378  
379  
380  
381  
382  
383  
384  
385  
386  
387  
388  
389  
390  
391  
392  
393  
394  
395  
396  
397  
398  
399  
400  
401  
402  
403  
404  
405  
406  
407  
408  
409  
410  
411  
412  
413  
414  
415  
416  
417  
418  
419  
420  
421  
422  
423  
424  
425  
426  
427  
428  
429  
430  
431  
432  
433  
434  
435  
436  
437  
438  
439  
440  
441  
442  
443  
444  
445  
446  
447  
448  
449  
450  
451  
452  
453  
454  
455  
456  
457  
458  
459  
460  
461  
462  
463  
464  
465  
466  
467  
468  
469  
470  
471  
472  
473  
474  
475  
476  
477  
478  
479  
480  
481  
482  
483  
484  
485  
486  
487  
488  
489  
490  
491  
492  
493  
494  
495  
496  
497  
498  
499  
500  
501  
502  
503  
504  
505  
506  
507  
508  
509  
510  
511  
512  
513  
514  
515  
516  
517  
518  
519  
520  
521  
522  
523  
524  
525  
526  
527  
528  
529  
530  
531  
532  
533  
534  
535  
536  
537  
538  
539  
540  
541  
542  
543  
544  
545  
546  
547  
548  
549  
550  
551  
552  
553  
554  
555  
556  
557  
558  
559  
560  
561  
562  
563  
564  
565  
566  
567  
568  
569  
570  
571  
572  
573  
574  
575  
576  
577  
578  
579  
580  
581  
582  
583  
584  
585  
586  
587  
588  
589  
590  
591  
592  
593  
594  
595  
596  
597  
598  
599  
600  
601  
602  
603  
604  
605  
606  
607  
608  
609  
610  
611  
612  
613  
614  
615  
616  
617  
618  
619  
620  
621  
622  
623  
624  
625  
626  
627  
628  
629  
630  
631  
632  
633  
634  
635  
636  
637  
638  
639  
640  
641  
642  
643  
644  
645  
646  
647  
648  
649  
650  
651  
652  
653  
654  
655  
656  
657  
658  
659  
660  
661  
662  
663  
664  
665  
666  
667  
668  
669  
670  
671  
672  
673  
674  
675  
676  
677  
678  
679  
680  
681  
682  
683  
684  
685  
686  
687  
688  
689  
690  
691  
692  
693  
694  
695  
696  
697  
698  
699  
700  
701  
702  
703  
704  
705  
706  
707  
708  
709  
710  
711  
712  
713  
714  
715  
716  
717  
718  
719  
720  
721  
722  
723  
724  
725  
726  
727  
728  
729  
730  
731  
732  
733  
734  
735  
736  
737  
738  
739  
740  
741  
742  
743  
744  
745  
746  
747  
748  
749  
750  
751  
752  
753  
754  
755  
756  
757  
758  
759  
760  
761  
762  
763  
764  
765  
766  
767  
768  
769  
770  
771  
772  
773  
774  
775  
776  
777  
778  
779  
780  
781  
782  
783  
784  
785  
786  
787  
788  
789  
790  
791  
792  
793  
794  
795  
796  
797  
798  
799  
800  
801  
802  
803  
804  
805  
806  
807  
808  
809  
810  
811  
812  
813  
814  
815  
816  
817  
818  
819  
820  
821  
822  
823  
824  
825  
826  
827  
828  
829  
830  
831  
832  
833  
834  
835  
836  
837  
838  
839  
840  
841  
842  
843  
844  
845  
846  
847  
848  
849  
850  
851  
852  
853  
854  
855  
856  
857  
858  
859  
860  
861  
862  
863  
864  
865  
866  
867  
868  
869  
870  
871  
872  
873  
874  
875  
876  
877  
878  
879  
880  
881  
882  
883  
884  
885  
886  
887  
888  
889  
890  
891  
892  
893  
894  
895  
896  
897  
898  
899  
900  
901  
902  
903  
904  
905  
906  
907  
908  
909  
910  
911  
912  
913  
914  
915  
916  
917  
918  
919

### Only Ju.A. Influence of the Conditions of Measuring Upon Evaluating the

Butcher, O. V. Development of Eye Tumor of Rattus norvegicus Over Nine 42-  
 Months of Age According to Data Obtained by the Petrikin Census Method 201

2222 **Religious Survey Operations**

**Tejeda, J. Z.** The Problem of Determining the Point of Vater-Petroleum Contact Under Conditions of Cased Wells in Carbonate Deposits

**Keyunshaya, D.Y., and Z. Ye. Gusev. Analysis of Rock Based on Neutron-**

Induced Activity \_\_\_\_\_ 208

**Alexseyev, P. A., V. I. Ielitsky, and A. A. Klonov.** The Problem of Reducing the Uranium Content in Oil-Field Waters. 2523

Yermakov, V.I., A.Y. Leubchenko, N.O. Oranovskiy, Yu. A. Romanov, and L.N. Rostovskiy. Results of Investigation of Features of Gamma Radiation in Oil.

### Berling Region, Using Aerial and Ground Radioelectric Survey Methods



FILONOV, V.A.

Geochemical characteristics of underground waters in the  
Khanka Lowland. Sov.geol. 2 no.9:105-111 S '59.  
(MIRA 13:2)

1. Institut geologii i razrabotki goryuchikh iskopayemykh.  
(Khanka Lowland--Water, Underground)

FILONOV, V.A.

Hydrochemical characteristics of the Suyfun-Khankay Depression.  
Trudy Inst. geol. i razrab. gor. iskop. 1:341-362 '60.

(MIRA 14:1)

(Suyfun-Khankay Depression--Water, Underground)

GAMERSHTEYN, V.A., inzh.; LITVINENKO, V.G., inzh.; Prinimali uchastiye:  
FILONOV, V.A., inzh.; KSENDZUK, F.A., inzh.; SAMOYLOV, I.D.,  
inzh.; VERBITSKIY, A.I., inzh.; YASHNIKOV, D.I., inzh.;  
LEYCHENKO, M.A., kand. tekhn. nauk; CHAMIN, I.K., tekhnik;  
TOKAR', P.K., inzh.; ZAYTSEV, P.P., inzh.

Mastering the production of cold-rolled sheets. Met. i gornorud.  
prom. no.6:72-74 N-D '62. (MIRA 17:8)

1. Zavod "Zaporozhstal'" (for Gamershteyn, Litvinenko, Filonov,  
Ksendzuk, Samoylov, Verbitskiy, Yashnikov). 2. Tsentral'nyy  
nauchno-issledovatel'skiy institut chernoy metallurgii im.  
Bardina (for Leychenko, Chamin, Tokar', Zaytsev).

FILONOV, V.A.

Effect of the organic matter on the shift of radioactive equilibrium in the waters of oil fields. Sov. geol. 7 no.6:144-146  
Je '64 (MIRA 18:1)

1. Institut geologicheskikh nauk AN BSSR.

FILONOV, V.A.; BAKSHAYEVA, I.A.

Distribution of radioactive elements in the formation waters  
of the Pripet fault. Dokl. AN BSSR 8 no.2:120-123 F '64.

(MIRA 17:8)

1. Institut geologicheskikh nauk Gosudarstvennogo geologicheskogo komiteta SSSR. Predstavleno akademikom AN BSSR  
G.V. Bogomolovym.

FILONOV, V.A.; LONDINSKAYA, K.I.

Content of phenols in natural waters. Dokl. AN BSSR 8 no.10:664-666  
0 '64. (MIRA 18:3)

1. Institut geologicheskikh nauk Gosudarstvennogo geologicheskogo  
komiteta SSSR.

FILONOV, V.A.

Uranium in oils of the Dnieper-Donets Lowland and Pripet trough.  
Dokl. AN SSSR 159 no.2:355-356 N '64. (MIRA 17:12)

1. Institut geologicheskikh nauk AN BSSR. Predstavleno akademikom  
N.M. Strakhovym.

FILONOV, Viktor Arturevich

Some features of the flight operation of jet transport planes.

Grazhd. av. 12 no.7:19-22 J1 '55.

(MIRA 11:6)

1. Komandir reaktivnogo transportnogo samoleta.  
(Jet transports)



FILONOV, V. A.

AUTHOR: Filonov, V., Pilot, 1st Class

84-12-27/49

TITLE: Winter Flying the Tu-104 (Polety na Tu-104 v zimnikh usloviyakh)

PERIODICAL: Grazhdanskaya aviatsiya, 1957,<sup>14</sup> Nr 12, pp 15-17 (USSR)

ABSTRACT: The author, one of the foremost jet airliner pilots reports on his experiences in winter flying. The first and basic condition for uninterrupted service is freedom of runways from snow or ice under any circumstances. A separate runway for jet aircraft is suggested, so that there will be enough time between landings to do the clearing work. He refers to difficult working conditions of maintenance men in intermediate airports when the weather is cold, but insists nevertheless on the quality of work. The author objects to the method of removing ice crust from the airfram by washing it away with hot water, which can get into the engine compressors. He also requests that the weather service report the type of clouds, their lower and upper limits, the probability of icing, air temperatures up to 10 -11 km at the airport of departure as well as within a radius of 250-300 km along the route and the weather conditions at the destination for the time of landing. The utilization of information from airliners in flight is urged, to

Card 1/2

Winter Flying the Tu-104

84-12-27/49

insure a correct forecast for at least 3-4 hours. The distribution of bulletins should be extended to the airfield and the maintenance services. Further, the utilization of radio and radio-navigational facilities is considered a vital factor in achieving regularity and safety. Their use is recommended under all circumstances for the purpose of training. The traffic control agencies are criticized for their inability to cope adequately with the high-speed, heavy jet aircraft. The author also discusses errors made by other pilots in handling the Tu-104 under various circumstances. Finally, the use of the de-icing system is discussed, the main requirement being that it be switched on before ice forms.

AVAILABLE: Library of Congress

Card 2/2

SOV/84-58-10-10/54

AUTHOR: Filonov, V. A.

TITLE: Important Tasks (Vazhnyye zadachi)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 10, p 7 (USSR)

ABSTRACT: The author states that the volume of traffic on the Tu-104, opened in 1958, is steadily growing in his unit. Air routes now connect Moscow with Tirana, Kopenhagen, Brussels, Amsterdam, Paris, Delhi, and Cairo. Dozens of crews were added to the service in the past two years. In the past few days regular runs started on the three and a half thousand km Moscow - Alma-Ata route. There is one photograph of the Tu-104 plane.

Card 1/1

FILONOV, V.M.

Simplest type of explosives. Put' i put.khoz. 4 no.9:39 S '60.  
(MIRA 13:9)

1. Nachal'nik otдела burovzryvnykh rabot tresta Mostoremtonnel'.  
(Explosives)

FILONOV, V.M.

Use of microcharges for blasting in quarries. Put' i put.  
khoz. 8 no.7:26 '64. (MIRA 17:10)

1. Nachal'nik otдела Gosudarstvennogo instituta po geologicheskim  
izyskaniyam i proyektirovaniyu shchebenochnykh zavodov i kar'yerov  
Gosudarstvennogo proizvodstvennogo komiteta po transportnomu  
stroitel'stvu SSSR.

AUTHOR: Filonov, V. S.

48-1-20/20

TITLE: Industrial ~~Specimens~~ of Detectors for Thermal and Fast Neutrons  
(Promyshlennyye obraztsy detektorov teplovykh i bystrykh  
neytronov).

PERIODICAL: Izvestiya AN SSSR Seriya Fizicheskaya, 1958, Vol. 22, Nr 1,  
pp. 94-96 (USSR).  
Received: March 8, 1958

ABSTRACT: The detectors described here were produced for industry-  
samples of dosimeters of thermal and fast neutrons of the type  
PH-3 and PH-4. The best detector for fast neutrons is the de-  
tector described in publications under the name of "Tabletka  
Gornyaka" (reference 1). It possesses a sufficiently high re-  
cording-efficacy of fast neutrons in the energy range of  
 $0,5 \div 14$  MeV on a  $\gamma$ -background to  $250 \mu r \text{ sec}^{-1}$ . According to  
reference 1 this efficiency amounts to  $\sim 1\%$  for the energy of  
4 MeV. The efficiency changes at various neutron-energies in  
such a manner that, to a certain degree, it reproduces the  
course of the dose-curve. The impulses produced under the in-  
fluence of  $\gamma$ -radiation are according to amplitude, smaller by  
one order of magnitude than the impulses of the neutrons.

Card 1/3

Industrial Specimens of Detectors for Thermal and Fast Neutrons.

48-1-20/20

This makes it possible to realize a reliable discrimination of the  $\gamma$ -background. The efficacy of the recording of neutrons correspondingly also decreases. The detector has no directivity: a modification of the angle of incidence of neutrons changes the efficacy of recording ( $\pm 5\%$ ). The temperature-testing of this detector with the photoelectron-multiplier  $\Phi 34-19$  showed that with a rise of temperature by  $1^\circ$  in the temperature range of  $10 \div 60^\circ$  counting decreases by  $0,6\%$ . In this connection the amplitude of the radiation-impulses decreases, whereas the noise-amplitude increases. The investigations showed that every resistance of the divisor may in the photoelectron-multiplier  $\Phi 34-19$  not be taken larger than 5 megaohm. An increase in the resistance in large  $\gamma$ -fields ( $\sim 250 \mu r \text{ sec}^{-1}$ ) leads to a strong redistribution of the potentials at the last dynodes. But this makes special demands on the power of the feed source of the photomultiplier. The use of a divisor with a resistance of 5 megaohm in connection with a voltage that guarantees the maximum ratio signal/noise restricts the error to  $\pm 3\%$ . The scattering of the efficacy of the detector does not exceed  $\pm 10\%$ . The thermal neutron detector differs from the above-described one by the presence

Card 2/3

Industrial Specimens of Detectors for Thermal and Fast Neutrons.

48-1-20/20

of boron anhydride in the former. In the first case the heavy ionizing particle is produced due to an inelastic collision, in the second case due to an inelastic one. Therefore the detectors are very similar according to their parameters and can be exchanged in devices without additional adjustment. The deficiency in the detector for thermal neutrons is the counting of fast neutrons. But in measurements of the maximum permissible flow of thermal neutrons on the background of a maximum permissible flow the counting of the fast neutrons amounts to less than 1%. There are 6 figures, 1 table, and 1 reference, 1 of which is Slavic.

AVAILABLE:

Library of Congress

1. Neutron counters 2. Radiation counters 3. Dosimeters

Card 3/3



S/578/61/000/002/002/002  
EO32/E514

9,6150

AUTHORS: Filonov, V.S. and Sel'dyakov, Yu.P.  
TITLE: A detector for intermediate-energy neutrons  
PERIODICAL: Zhernov, V.S. and Shirshov, D.P., eds. Uzly novoy apparatury dlya issledovaniya yadernykh izlucheniyy; nauchno-tekhnicheskiy sbornik. no.2. Moscow, Gosatomizdat, 1961, pp.107-110

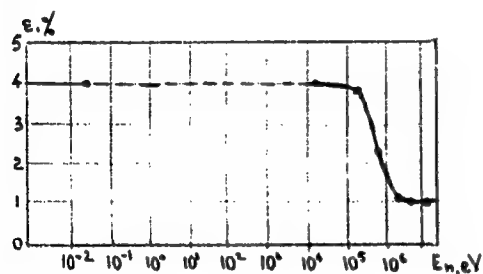
TEXT: The authors have used a perspex phosphor (3.7 cm thick, 8 cm in diameter, mounted on a ~~Q3Y-24~~ (FEU-24) photo-multiplier). The phosphor contained 5 g of a substance referred to as T-1 per 240 g of perspex. The T-1 is said to have been developed by T. V. Timofeyeva and S. P. Khormushko (Ref.1: Izv. AN SSSR, seriya fiz., 22, No.1, 14-20, 1958; Ref.2: Atomnaya energiya, 3, No.3, 1958) and is being manufactured by the "Red Chemist" factory. Fig.1 shows the efficiency of the detector as a function of the neutron energy (eV). It was found that by discriminating against a  $\gamma$ -ray background of 1000  $\mu$ r/sec ( $\text{Co}^{60}$   $\gamma$ -rays) the efficiency was reduced by a factor of 4-5. A change in the energy of the  $\gamma$ -rays did not have a great effect on the

Card 1/2

A detector for intermediate ...

S/578/61/000/002/002/002  
E032/E514

neutron counting rate. Fig.3 shows the neutron efficiency as a function of the energy of the  $\gamma$ -rays which were discriminated against. Acknowledgments are expressed to I. V. Timofeyeva for advice on the phosphor, S. N. Baykalov, M. V. Blinov, A.I. Seryakov and A. S. Solov'yev for carrying out some of the measurements, V. V. Matveyev and M. N. Pchel'nikov for assistance in this work and to N. N. Prihodchenko for developing the detectors. There are 3 figures and 4 Soviet references.



Card 2/2

Fig.1

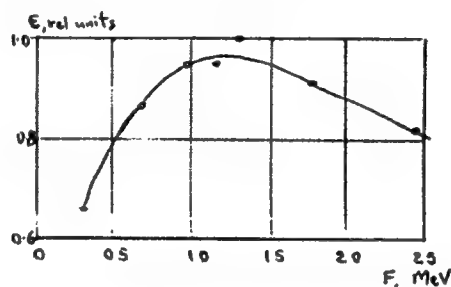


Fig.3

PHASE I BOOK EXPLOITATION

SOV/6058

Polikarpov, V. I., V. S. Filonov, O. V. Chubakova, and N. N. Yuzvuk.

Kontrol' germetichnosti teplovydelyayushchikh elementov (Monitoring the Hermeticity of Fuel Elements). Moscow, Gosatomizdat, 1962. 186 p. Errata slip inserted. 2500 copies printed.

Ed.: Ye. I. Panasenkov; Tech. Ed.: Ye. I. Mazel'.

PURPOSE: This book is intended for engineers and technicians specializing in the design and operation of reactors and of systems for monitoring the hermeticity of fuel-element jackets.

COVERAGE: The principles of designing systems for monitoring the hermeticity of fuel-element jackets are presented. Particular attention is given to the physical and chemical phenomena affecting system sensitivity and efficiency.

Card 1/42

Monitoring the Hermeticity (Cont.)

SOV/6058

The existing or projected non-Soviet systems are surveyed. Formulas and tabulated reference data for the designer's use are included. There are 135 references: 90 Soviet (including 25 translations), 42 English, 2 French, and 1 German.

TABLE OF CONTENTS [Abridged]:

Introduction	3
Ch. I. Destructive Processes in Fuel Elements	5
1. Fuel elements	5
2. Causes of hermeticity failure in fuel-element jackets	6
3. Development of defects in fuel-element jackets	10
4. Estimating the release of fission-fragment products from a damaged fuel element	12
5. Concentration of fission-fragment products in the coolant	25
6. Determining the sensitivity of systems for monitoring the hermeticity of jackets	28

Card 2/2

22(1)

SOV/47-59-3-22/53

AUTHOR: Filonov V.V.

TITLE: Model of an Artificial Earth Satellite

PERIODICAL: Fizika v shkole, 1959, Nr 3, p 74 (USSR)

ABSTRACT: The author describes a model intended to be used in school for illustrating an artificial satellite orbit. The model consists of a globe with vertical axle and a device which marks a satellite orbit with chalk. When the model is operated, the graph marked by the device represents the function of the rotary motion of the earth and the revolutions of the satellite. There is 1 diagram.

ASSOCIATION: Malopereshchepinskaya srednyaya shkola, Poltavskaya Oblast' (Malaya Pereshchepina Secondary School, Poltava Oblast )

Card 1/1

L 1260-66

ACCESSION NR: AP5024392

UR/0286/65/000/015/0073/0073Q  
615.372.002.2 B

AUTHOR: Arkhipov, V. V.; Filonov, Yu. A.; Nechayeva, L. A.; Khrushchev, V. G.;  
Perminov, T. A.; Shevyrev, N. S.; Zolozov, I. S.; Belyayev, A. S.; Nozdrachev, A.  
I.; Yevglevskiy, A. A.

TITLE: A method for manufacturing tuberculin. Class 30, No. 173381

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 73

TOPIC TAGS: tuberculosis, immunology, allergen

ABSTRACT: This Author's Certificate introduces a method for manufacturing tuberculin. The method consists of growing a tubercular culture on a nutrient medium, removal of the bacterial matter and filtration. An active and specific allergen is produced and labor-consuming operations are reduced by exposing the culture to  $\text{Co}^{60}$   $\gamma$ -radiation.

ASSOCIATION: none

SUBMITTED: 11Jun64

NO REF SOV: 000

ENCL: 00

OTHER: 000

SUB CODE: LS

Card 1/1

KROSS, A. [Cross, A.D.]; PENTIN, Yu.A., kand. khim. nauk [translator];  
FILONOVA, A.D., red.; KHOMYAKOV, A.D., tekhn. red.

[Introduction to practical infrared spectroscopy] Vvedenie v  
prakticheskuiu infrakrasnuiu spektroskopiiu. Moskva, Izd-vo  
inostr. lit-ry, 1961. 109 p. (MIRA 15:1)  
(Spectrum, Infrared)

11.1320  
11.1230

24020  
3/076/61/035/005/004/008  
B101/B216

Skorokhodov, I. I., Nekrasov, L. I., Kobozev, N. I., and  
Filonova, A. D. (Moscow)

TITLE: Study of the formation of hydrazine during dissociation of  
ammonia in an electric glow discharge

PERIODICAL: Zhurnal fizicheskoy khimii, v. 55, no. 5, 1961, 1026-1030

TEXT: The industrial synthesis of hydrazine according to Raschig is too  
expensive because the dilute solutions obtained must be concentrated.  
Therefore, the production of hydrazine by electric discharge was studied.  
The authors present a survey of results obtained by western scientists and  
the reaction equations proposed by them, and report on their own experi-  
ments intended to clarify the mechanism of hydrazine formation. For this  
purpose, they used the apparatus described in Ref. 1) (Zh. fiz. khimii, 51,  
1943, 1961), which was used by the authors of that paper to study the water  
vapor dissociated by electric discharge.  $\text{NH}_3$  entered a U-shaped discharge  
tube and was collected in a vessel cooled by liquid nitrogen. The

Card 1/6



24020

S/076/61/034/005/003/008

P101/B218

Study of the formation of hydrazine during

electrodes were made of stainless steel. The pressure of  $\text{NH}_3$ , which varied between 5-10 mm Hg, was measured by a diaphragm gauge. The flow of  $\text{NH}_3$  varied between 0.9 and 6.2 l/hr (pressure 1 atm). The discharge current was 0.05-0.25 a, which corresponded to a power of 60-120 w. The hydrazine formed was determined photoelectro-colorimetrically by means of p-dimethyl aminobenzaldehyde. The fraction of  $\text{NH}_3$  which did not react was collected in  $\text{H}_2\text{SO}_4$  and determined by titration of the excess acid. The authors found that the yield of  $\text{N}_2\text{H}_4$  attains a maximum at 5.3 mm Hg, regardless of the discharge intensity. In order to establish a law on the basis of the experimental data, the authors took  $up/v$  as a parameter ( $u$  is proportional to the discharge,  $v$  denotes the rate of flow of the gas, l/hr;  $p$  is the gas pressure at the input of the discharge tube, mm Hg). Fig. 1 shows the degree of dissociation of  $\text{NH}_3$  as a function of  $up/v$ ; Fig. 2 shows the relative yield of  $\text{N}_2\text{H}_4$  (expressed in % of dissociated  $\text{NH}_3$ ) as a function of  $up/v$ . The maximum yield was 4 % referred to dissociated  $\text{NH}_3$ , and 0.5 %

Card 2/6

Study of the formation of hydrazine during... <sup>24020</sup>  
S/076/61/035/005/003/008  
B101/B218

referred to the total amount of  $\text{NH}_3$  passed through the apparatus. Experiments at  $-80$  and  $-196^\circ\text{C}$  showed that the yield of  $\text{N}_2\text{H}_4$  does not depend on temperature. It is concluded that the formation of hydrazine proceeds according to the equation  $\text{NH}_2 + \text{NH}_2 + \text{M} \rightarrow \text{N}_2\text{H}_4 + \text{M}$  (5), where M is a particle causing recombination. Dissociation of  $\text{N}_2\text{H}_4$  proceeds according to the equations  $\text{N}_2\text{H}_4 \rightarrow \text{N}_2\text{H}_4^* \rightarrow 2\text{NH}_2$  (6) and  $\text{N}_2\text{H}_4 + \text{H} \rightarrow \text{NH}_2 + \text{NH}_3$  (7). Thus, the yield of  $\text{N}_2\text{H}_4$  depends on several factors which set together: 1) on the concentration of  $\text{NH}_2$  radicals, which is inversely proportional to the dissociation of  $\text{NH}_3$ ; 2) on the concentration of atomic hydrogen, which is directly proportional to the dissociation of  $\text{NH}_3$ ; 3) on the time for which the gas remains in the discharge tube. The shorter this period, the less is the dissociation of  $\text{N}_2\text{H}_4$ . A maximum degree of  $\text{NH}_3$  dissociation corresponds to a minimum concentration of  $\text{NH}_2$  radicals and to a maximum concentration of atomic hydrogen. Thus, the yield of hydrazine reaches a

X

End 3/6

24020

S/C76/61/035/005/003/008

B101/B218

Study of the formation of hydrazine during...

minimum with maximum dissociation of  $\text{NH}_3$ . S. S. Vasil'yev and Ye. N. Yerebin are mentioned. There are 2 figures and 14 references: 3 Soviet-bloc and 11 non-Soviet-bloc. The 3 most important references to English-language publications read as follows: J. C. Devins, B. Milton, J. Amer. Chem. Soc., 76, 2618, 1954; G. W. Robinson, M. J. McCarty, J. Chem. Phys., 30, 929, 1959; K. Ouchi, J. Electrochem. Soc. Japan, 20, 381, 1952.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova  
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: July 3, 1959

Card 4/6

MAYRANOVSKIY, S.G.; FILONOVA, A.D.

Kinetic surface waves of 5-R-2-acetylthiophene in water-methanol solutions. Elektrokhiimiya 1 no.9:1044-1051 S '65.  
(MIRA 18:10)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR  
i Institut elektrokhiimii AN SSSR.

FILONOVA, L.

Shorter working day. Neftianik 5 no.3:1-2 Mr '60. (MIRA 14:9)

1. Nachal'nik ORKTIZA Upravleniya nefte dobyvayushchey i gazovoy  
promyshlennosti Checheno-Ingushskoy ASSR.  
(Hours of labor) (Wages)

11(0)

PHASE I BOOK EXPLOITATION

SOV/1265

Kamyshev, Sevast'yan Filippovich, Galikhin, Viktor Dmitriyevich, Larin  
Vasiliy Il'ich, Mikhaylov, Leonid Leonidovich, Filonova, Lidiya Ivanovna,  
Yasnits, Mikhail Grigor'yevich, and Kvochkin, Fedor Abramovich

Groznenskaya neftyanaya promyshlennost' (The Grozny Petroleum Industry) Moscow,  
Gostoptekhizdat, 1957. 57 p. 1,500 copies printed.

Executive Ed.: Lozbyakova, Ye. S.; Tech. Ed.: Polosina, A.S.

**PURPOSE:** The book is intended for engineers, technicians and workers in the  
petroleum industry.

**COVERAGE:** The status of the Grozny petroleum industry before the Revolution and  
the achievements in the recovery and refining of petroleum during the 40 years  
after the Revolution are discussed. New oil fields, petroleum installations  
and modern techniques and procedures introduced in the Grozny petroleum indus-  
try are described. No facilities are mentioned. No references are given.

Card 1/3

11(0)

SOV/1265

The Grozny Petroleum Industry

TABLE OF CONTENTS:

Page

Ch. I. Development of the Grozny Petroleum Industry from the Time of Its Nationalization up to the Time of the Implementation of the Sixth Five Year Plan	3
Grozny petroleum industry before its nationalization	3
Grozny petroleum industry during the first years after its nationalization	3
The first five-year plans	8
The Great Patriotic War and the period of reconstruction of the national economy	11
The post-war period	14
Ch. II. Present Status and Prospects of Development of the Grozny Petroleum Industry	19
Ch. III. Development of Geological Prospecting in the Grozny Petroleum Industry	25

Card 2/3

80V/1265

11(0)

The Groznyy Petroleum Industry

Ch. IV. Development of Techniques of Oil Well Drilling Technology in the Groznyy Oilfields	32
Oil well drilling	32
Construction of derricks	33
Oil well structure	34
Drilling conditions, turbodrills and rock bits	35
Directional turbodrilling	37
Mechanization of the labor-consuming operations	41
Drilling and power equipment	42
Cementing wells	42
Testing wells	43
Ch. V. Development of Technology and Techniques in the Groznyy Oilfields	45
Ch. VI. Development of Techniques and Refining Technology in the Groznyy Petroleum Industry	53
Conclusion	58

AVAILABLE: Library of Congress

Card 3/3

TM/mas  
3-19-59



SHVETS, V.I.; VOLKOVA, L.V.; VASIL'YEVA, V.V.; FILONOVA, L.M.;  
PREOBRAZHENSKIY, N.A.

Lipides. Part 18: Synthesis of mixed unsaturated  $\alpha, \beta$ -diglycerides.  
Zhur.ob.khim. 33 no.6:1843-1847 Je '63. (MIRA 16:7)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni  
M.V.Lomonosova.

(Glycerides)

TURSIN, V.M.; CHEBOTAREVA, L.G.; FILONOVA, L.M.; POPOVA, S.M.;  
PREOBRAZHESNKIIY, N.A.

Lipoic acid. Part 1: Synthesis of racemic lipoic acid and  
its derivatives. Zhur. ob. khim. 34 no.11:3662-3664 N '64  
(MIRA 18:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.

ALEKSEYEV, F.A., doktor geol.-miner. nauk, prof., red.; FILONOVA,  
V.A., kand. geol.-miner. nauk, red.; IONEL', A.G., ved.  
red.; FEDOTOVA, I.G., tekhn. red.

[Nuclear geophysics; 1961, issue]Iadernaia geofizika; vypusk  
1961 g. Moskva, Gostoptekhizdat, 1962. 229 p.  
(MIRA 16:3)

(Nuclear geophysics)

YUDAYEV, N.A. ; FILONOVA, Ye.A.

Effect of adrenosterone on the transformation of hydrocortisone into cortisone in guinea pig tissues in vitro. Probl. endok. i gorm. 11 no.2:72-75 Mr-Apr '65. (MIRA 18:7)

1. Laboratoriya biokhimii gormonov i gormonal'noy regulyatsii funktsii (zav. - chlen-korrespondent AMN SSSR N.A.Yudayev)  
Instituta meditsinskoy i biologicheskoy khimii AMN SSSR, Moskva.

FILONOVA, Ye.A.

Effect of adrenosterone on the conversion of hydrocortisone in  
the guinea pig liver in vitro. Vop. med. khim. 10 no.5:483-  
488 S-O '64. (MIRA 18:11)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR,  
Moskva.

FILONOVA, Z.G., starshaya akusherska

Work of maternity home No.10 in Moscow. Fel'd. i akush. 26 no.12:  
43-44 D '61. (MIRA 14:12)

(MOSCOW—MATERNITY HOMES)

BOBROV, A., inzh.; FILONOVICH, B., inzh.

Heating frozen ground with electric needles. Na stroi. Ros. 3  
no.10:13 0 '62. (MIRA 16:6)

(Frozen ground)

SOV-98-58-E-13/22

AUTHORS: Berzhanvskiye, K.V., Filonovich, B.P., Engineers

TITLE: The Transportation of Concrete Mixtures by Automobiles  
(O perevozke betonnoy smesi avtotransportom)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1958, <sup>47</sup>Nr 8, p 45 (USSR)

ABSTRACT: In connection with an article by Yu.N. Solov'yev "Construct Automobiles for the Transportation of the Concrete" published in Nr 5 (1957) of this periodical, the author finds that many of definitions propounded by Solov'yev are unfounded. There is 1 diagram.

1. Concrete--Handling 2. Automobiles--Applications

Card 1/1



IVITSKIY, A.I., prof.; FILONOVICH, P.K., inzh.

Silting of tile drainage in mineral soils. Gidr. i mel. 16 no.6:  
33-39 Je '64. (MIRA 17:9)

1. Nauchno-issledovatel'skiy institut melioratsii i vodnogo  
khozyaystva BSSR.

1. FILONOVICH, T.S.
2. USSR (600)
4. Globes
7. A globe from the tooth of a sperm whale, Izv.Vses.geog.ob-va 85 no. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Unclassified.

SHNEYERSON, A.A.; PARFENOVA, M.S.; FILONOVSKAYA, M.G.

Typical structure of dysentery cultures of the Flexner group.  
Zhur.mikrobiol.epid.i immun. no.3:89 Mr '54. (MLRA 7:4)

1. Iz Odesskogo instituta epidemiologii i mikrobiologii im. Mech-  
nikova, (Shigella paradysenteriae)

LATSINIK, Ye.Ya., prof.; SUSHKO, S.R.; FILONOVSKAYA, M.G.; ISKOL'D, G.Z. (Odessa)

Diagnosis and clinical aspects of salmonellosis caused by  
Heidelberg and London bacteria. Vrach.delo no.2:143-147  
P '59. (MIRA 12:6)

1. Gorodskaya infektsionnaya bol'nitsa.  
(SALMONELLA)

VIDERGOLT, V. [Wiederholt, W.], doktor; FILONOVSKAYA, Z.A. [translator]

High-speed drops destroy materials. Priroda 50 no.4:87-89 Ap  
'61. (MIRA 14:4)

(Drops) (Surfaces, Deformation of)

FILONOWICZ, Piotr

Geological map of the southern part of the Morawica chart.  
Kwartalnik geol 5 no.4:1006 '61.

1. Siwetokrzyska Stacja Terenowa, Instytut Geologiczny, Warszawa.

FILONOWICZ, Piotr

Lower Eifelian in the Godow Anticline. Kwartalnik geol  
6 no.3:351-365 '62.

1. Swietokrzyska Stacja Terenowa, Instytut Geologiczny,  
Warszawa.

FILONOWICZ, Piotr

Geological and structural scale 1: 10 000 map of the  
Wzdol - Bostow region. Kwartalnik geol 6 no.4:808-809  
'62.

1. Swietokrzyska Stacja Terenowa, Instytut Geologiczny,  
Warszawa.



GUREVICH, S.M.; DIDKOVSKIY, V.P.; NOVIKOV, Yu.K.; FILORIK'YAN, B.K. (Moskva);  
ZASETSKIY, G.F. (Moskva); KRAVCHENKO, V.F. (Moskva); NOVIKOVA, A.A. (Moskva)

Properties of commercial titanium and alloys of the OT4-type prepared  
by electric slag melting. Avtom. svar. 16 no.4:27-33 Ap '63.  
(MIRA 16:4)

1. Institut elektrosvariki im. Ye.O.Patona An UkrSSR (for Gurevich,  
Didkovskiy, Novikov).  
(Titanium--Electrometallurgy) (Zone melting)

[illegible]

FILISOFOV, B. I.

Filosofov, B. I. "The critical condition of ground waters that salt the soil under conditions in the Mugan-Sal'yanskiy mountain range," Trudy Azerbaydzh. nauch.-issled. in-ta gidrotekhniki i melioratsii, Vol. 1, 1948, [On cover: 1949\_7, p. 58-67  
-- Bibliog: 14 items

SO: U3566, 15 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 14, 1949).

ФИЛОСОВ, Б.И.

13

Determining the diffusion coefficient of salts in the ground by the method of successive extractions. B. I. Filosov and M. M. Mekhtiev. *Psychovodnye (Pedol. ogy)* 1980, 171-7. A math. treatment on the application of the second Fick equation (which indicates the existence of a direct proportionality between the increasing gradient of concn. in space and the increase in concn. with time) to evaluation of the diffusion of salts in the soil.

L. S. Joffe